

April 14, 2004

P: 5.18.1

Justice A.S. Anand  
Chairman  
National Human Rights Commission  
Sardar Patel Bhawan,  
Sansad Marg  
New Delhi – 110 001

Dear Justice Anand,

I am sending you a copy of our magazine *Down to Earth (DTE)* with the cover story on the people suffering from diseases because of pesticide spraying in Kerala.

You will recall that the NHRC has taken up this matter in 2001 on behalf of the people of Padre village. The people in this village are suffering from horrendous diseases including congenital anomalies, reproductive disorders and neurological abnormalities and it is widely understood that there is a linkage between the diseases in this villages and the use of endosulfan pesticide that has been sprayed for twenty years in the cashew plantation in Kerala.

In 2001, NHRC had taken up this matter and asked the Indian Council of Medical Research (ICMR) to conduct an investigation. The ICMR had directed its premier institution, the Ahmedabad based, National Institute of Occupational Health (NIOH) to conduct a scientific study. Their report, submitted in early 2002, noted the presence of alpha and beta endosulfan — the pesticide's isomers — in soil, water as well as human blood samples of children collected from the region. This implies that the pesticide persists in the environment. The report also found that the samples of blood collected from Padre showed high levels of endosulfan as compared to samples collected from the control village of Meenja Panchayat. In its considered view "endosulfan was the causative factor" for health problems in the village.

In September 2002, the Central government set up a committee chaired by Dr. O.P. Dubey, assistant director general of ICAR to investigate the study of NIOH and other related studies and to recommend future steps. In 2003, the Dubey committee report was submitted to the government, which was immediately accepted.

This expert committee concluded "there is no link between the use of endosulfan in PCK (Plantation Corporation of Kerala) plantations and health problems reported from Padre."

But details uncovered by *DTE* show that the scientific study done by Tamil Nadu-based accredited private laboratory Fredrick Institute of Plant Protection and Toxicology (FIPPAT) (now known as International Institute of Bio-technology and Toxicology), used by the Dubey committee to support its conclusions, was doctored. Not only was damning evidence against endosulfan suppressed, facts and figures were deliberately manipulated and misreported. *DTE* is in possession of

a copy of the FIPPAT's analytical report, dated June 4, 2001, which shows that the institute had actually found both alpha and beta endosulfan residues in human blood samples. It, however, chose not to disclose this information and fudged its data. The institute underreported the levels of residues found in the environment, too. Although FIPPAT had come across traces of alpha and beta endosulfan, it conveyed the impression that the isomers had broken down quickly to form endosulfan sulphate — a metabolite of the pesticide. The aim of this manipulation: to show that the pesticide is not persistent.

For instance, in the blood sample numbered HB 18, FIPPAT calculated and reported the total endosulfan residues to be less than 0.001 parts per million (ppm). But when the actual figures arrived at by the institute are used and formula applied the total residue level works out to 186 parts per billion (ppb) of endosulfan (alpha+beta). Significantly, the NIOH had found a maximum level of 78.74 ppb of the pesticide's residues in blood samples collected from Padre.

The Dubey report dismissed the NIOH study, observing that its findings were "not in conformity with the known and accepted properties, chemistry and toxicology of endosulfan". Instead, the committee endorsed FIPPAT's residue analysis. Unsurprisingly, the industry also supported the methodology adopted by FIPPAT and has rejected the NIOH report.

The undeniable fact is that people of Padre are suffering. There is a high incidence of disorders of the central nervous system, congenital anomalies, cancer and reproductive disorders. But the industry claims that these diseases are not similar to the mechanism of toxicity of endosulfan, that is, it cannot be the cause of such disorders. The Dubey committee report concurs but does not even bother to offer any explanation for the people's ailments. But research by *DTE* shows that there are several toxicity studies, conducted on laboratory animals, which have found that exposure to endosulfan on a long-term basis leads to similar effects.

Strangely, the Dubey committee's final report was submitted to the Union government despite a consensus not being evolved within the panel. *DTE* has also reported of dissent within the committee, with key scientific members, opposed to the report's findings.

I hope NHRC will pursue this case in the interest of people of Padre. Please do let me know if we can be of any further assistance. We would be happy to brief your colleagues who are working on this matter or provide any further information and clarification required.

With my very best wishes,

Yours cordially,

SUNITA NARAIN